Epidemiology Report

NORTH DAKOTA DEPARTMENT of HEALTH

July – August 2004

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HIV/AIDS Update

At a Glance: 2004

Table 1 summarizes newly diagnosed HIV/AIDS cases reported from Jan. 1 through June 30, 2004, and compares the data to the same period in 2003. The table also provides a summary about people diagnosed with HIV or AIDS as residents of North Dakota and known to be living as of June 30, 2004.

Table 1. HIV and AIDS by Gender, Age at Diagnosis, Race/Ethnicity, and Exposure Risk
North Dakota, 2003-2004

	New HIV Diagnoses [1] January - June				New AIDS Diagnoses [2] January - June				Living HIV and AIDS Cases [3]	
	2004		2003		2004		2003			
	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)
Gender										
Male	8	(89)	5	(100)	4	(100)	3	(100)	95	(80)
Female	1	(11)	0	--	0	--	0	--	24	(20)
Race/Ethnicity										
White, not Hispanic	6	(67)	5	(100)	4	(100)	3	(100)	87	(73)
American Indian	0	--	0	--	0	--	0	--	10	(8)
Black, not Hispanic	2	(22)	0	--	0	--	0	--	16	(13)
Hispanic, all races	1	(11)	0	--	0	--	0	--	6	(5)
Age at Diagnosis										
≤12	0	--	0	--	0	--	0	--	2	(2)
13-19	0	--	0	--	0	--	0	--	5	(4)
20-29	3	(33)	0	--	0	--	0	--	37	(31)
30-39	4	(44)	1	(20)	0	--	1	(33)	39	(33)
40-49	1	(11)	3	(60)	1	(25)	1	(33)	26	(22)
50-59	1	(11)	1	(20)	3	(75)	1	(33)	10	(8)
Risk										
Male-to-Male Sexual Contact (MMS)	5	(56)	3	(60)	2	(50)	1	(33)	57	(48)
Injecting drug use (IDU)	2	(22)	1	(20)	1	(25)	1	(33)	12	(10)
MMS/IDU	0	--	0	--	0	--	0	--	1	(1)
Heterosexual contact	1	(11)	0	--	1	(25)	0	--	27	(23)
Receipt of blood or tissue	0	--	1	(20)	0	--	1	(33)	3	(1)
Adult Hemophilia/coagulation disorder	0	--	0	--	0	--	0	--	2	(2)
Mother w/or risk for HIV infection	0	--	0	--	0	--	0	--	2	(2)
Pediatric hemophilia/coag. Disorder	0	--	0	--	0	--	0	--	1	(1)
Risk not specified	1	(11)	0	--	0	--	0	--	14	(12)
Total	**9**		**5**		**4**		**3**		**119**	

[1] New HIV diagnoses reflects all residents of North Dakota diagnosed with HIV infection for the first time during the time period, regardless of AIDS status. Some also may be counted as AIDS cases if they received an AIDS diagnosis during the same period.

[2] New AIDS diagnoses reflect all residents of North Dakota who first met the criteria for AIDS during the time period, regardless of when their HIV infection was reported to the state.

[3] Living HIV and AIDS cases reflect people diagnosed with HIV or AIDS as a resident of North Dakota and were known to be living on June 30, 2004. All deaths may not have been reported.

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Cumulative Reported Cases

As of June 30, 2004, 336 cumulative HIV/AIDS cases have been reported the North Dakota Department of Health (NDDoH) since HIV/AID surveillance began in 1984. Of these, 36 percent are known to have died, 27 percent are known to be living with AIDS, and 37 percent are known to be living with HIV but have not received an AIDS diagnosis. Cumulative reported cases include newly diagnosed cases of HIV infection and AIDS in North Dakota residents, and cases previously diagnosed in other states who reside in North Dakota during the reporting period.

Of the 336 reported cases:

- 85 percent were male; 15 percent female.
- 52 percent identified male-to-male sexual contact as a risk factor.
- 68 percent were between the ages of 20 and 39 at diagnosis.
- 78 percent (261) were white, 11 percent (37) were American Indian, 8 percent (28) were black, 3 percent (9) were Hispanic – any race, and 0.3 percent (1) were Asian/Pacific Islander.

It is important to note that a slight change in the number of reported HIV cases will result in significant changes in rates because of the relatively low numbers. In addition, all HIV/AIDS data are based on the best information available but are subject to change as more complete information is received.

HIV/AIDS Diagnosis: Reportable Conditions

Accurately counting newly diagnosed HIV and AIDS cases impacts federal resources allocated to North Dakota for HIV/AIDS prevention, surveillance, and care and supportive services for North Dakota residents. Providers in North Dakota are required to report to the NDDoH anyone with HIV for whom they are providing care or services.

Effective July 1, 2004, the North Dakota State Health Council approved adding the CD4 T-lymphocyte test results to the reportable conditions list as a possible indicator of HIV diagnosis. Any of the following indicators are mandated to be reported to the NDDoH: a confirmed, positive HIV antibody screen, detectable and non-detectable viral loads results and any CD4 T-lymphocyte test result.

Sexually Transmitted Disease (STD) Update

Chlamydia

During the first six months of 2004, 835 cases of chlamydia were reported to the NDDoH, a 4.9 percent increase from the 796 cases reported during the same time period in 2003. Five hundred forty-four (65.1%) of the cases were reported among females. People age 20 to 24 had the most reported cases with 399 (47.8%), followed by 15- to 19-year-olds with 259 (31.0%) and 25- to 29-year-olds with 109 (13.1%).

More cases were reported among whites than any other race. Four hundred ninety-three (59.0%) cases were reported among whites, followed by American Indians with 111 (25.2%), blacks with 48 (5.8%) and Hispanics with 17 (2.0%). However, minority populations continue to be disproportionately affected by STDs in North Dakota. The chlamydia rate for blacks for the first six months was 1225.7 per 100,000. Among American Indians, North Dakota's largest minority population, the rate was 670.3 per 100,000.

Seven hundred fifty-six (90.5%) of the reported cases were reported from 12 counties. The three counties with the highest chlamydia rates are counties with American Indian reservations. Sioux, Benson and Rolette counties reported incidences of 914.9, 502.6 and 453.48 per 100,000 population, respectively. These rates are significantly greater than the rate of 130.0 per 100,000 for all of North Dakota. Overall, eight counties (Sioux, Benson, Rolette, Ward, Barnes, Burleigh, Ramsey and Mountrail) reported rates greater than the North Dakota rate.

In the first six months of 2004, 9,218 chlamydia tests submitted from clinics participating in the Region VIII infertility prevention project in North Dakota were analyzed at the Division of Microbiology. Of these, 740 (8.0%) were positive.

Nine family planning clinics submitted 4,871 specimens of which 440 (9.0%) were positive. Of the family planning specimens, 4,355 were from females of which 339 (7.8%) were positive. Five hundred sixteen male specimens were submitted of which 101 (19.6%) were positive.

Other clinics participating in the Region VIII chlamydia project submitted 3,547 specimens for chlamydia testing; 300 (8.5%) were positive. Of those, 2,771 were from females and 203 (7.3%) were positive.

Compared to the first six months of 2003, the number of tests from Region VIII participating clinics increased 32.2 percent, from 6,975 tests in 2003 to 9,218 tests in 2004. The number of positive tests increased by 48.2 percent, from 499 in 2003 to 740 in 2004. The percentage of positive test results has increased from 7.2 percent during the first six months of 2003 to 8.0 percent for the same time period in 2004.

Gonorrhea

During the first six months of 2004, 61 cases of gonorrhea were reported to the NDDoH, a 62.3 percent increase over the 38 cases reported during the first six months of

2003. Forty (65.6%) of the cases occurred among females, a 66.7 percent increase compared to the 24 cases for the same time period the previous year. Reported cases among 25- to 29-year-olds increased from one case in 2003 to 15 cases in 2004. Increases were also noted in the age 20 to 24 and 25 to 29 groups.

Cases among American Indians increased 85.7 percent, the largest increase among all racial/ethnic groups. This increase primarily occurred on the Standing Rock Indian Reservation in Sioux County. This county borders South Dakota, and the reservation encompasses Sioux County in North Dakota and Corson County in South Dakota. These include cases in people residing on the North Dakota portion of the reservation.

During the first six months of 2003, gonorrhea cases were reported from 10 counties. Forty-four (72.1%) cases were reported from three counties. The largest increase in cases was reported from Ward County with a 900 percent increase, followed by Burleigh County with a 375 percent increase and Sioux County with a 166.7 percent increase.

In March 2003, the Division of Microbiology implemented Gen-Probe's APTIMA test system, which is a DNA amplification system that can detect both chlamydia and gonorrhea antigens from a single specimen during the same test procedure. All specimens submitted to the Division of Microbiology are routinely tested for both antigens. This procedure of routinely testing for both antigens has not changed since 2002 when the laboratory was using Gen-Probes Pace 2C test. However, what has changed is the testing technology, which involves moving from a nucleic acid detection probe to a nucleic acid amplification system.

Syphilis

During the first six months of 2004, no cases of primary, secondary or early latent syphilis were reported to the NDDoH.

For more information about Sexually Transmitted Diseases

Contact:

- Kirby Kruger, STD program manager, 701.328.4549

Or any of your local field epidemiologists:

- Gerry Haag, Dickinson, 701.483.0171
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Viral Hepatitis Coordinator

Viral hepatitis is an emerging public health problem. Recognizing the increasing threat of hepatitis-causing viruses, such as the hepatitis C virus, the Centers for Disease Control and Prevention (CDC) has provided funding for all 50 states to hire hepatitis coordinators. Kimberly Weis, MPH, is the new viral hepatitis coordinator in the Division of Disease Control at the North Dakota Department of Health. Kim's responsibilities will include integrating hepatitis prevention and control activities into existing public health programs.

MEET THE EPI

Name: Kimberly Weis
Health Unit: State health office in Bismarck, N.D.
Education Background: "My education consists of an MPH in epidemiology from the University of Minnesota and a BS in biochemistry/molecular biology from the University of Minnesota Duluth."
Past Experience: "Previous experience includes working for the University of Minnesota, where I served as a project manager/coordinator for two cardiovascular genetic epidemiology studies and several cardiovascular clinical trials. Prior to that, I worked at 3M, where I was involved in the development of assays for the rapid detection of bacteria in food.
Hobbies/family: "I was born and raised in Bismarck, so it's nice to be home after being away for 10 years. My hobbies include walking/hiking, traveling, reading and spending time with my husband and infant daughter.

MEET THE FIELD EPI

Name: Rachel Hanson
Health Unit: Grand Forks Public Health
Education Background: BA biology, anthropology at Luther College, Decorah, Iowa, and MPH epidemiology at the University of Minnesota
Past Experience: "I worked at the Minnesota Department of Health on "Team Diarrhea" doing surveillance on enteric pathogens and as a research assistant for the Minnesota Organization of Fetal Alcohol Syndrome and the Lao Family Community, an organization for teen pregnancy prevention in the Hmong community in St. Paul, Minn. Following, I began research at the University of Melbourne in Victoria, Autralia, on refugee health issues."
Family/Hobbies: "I am getting married next summer. My fiancé, Pete, is from Australia. I like to swim and cross-country ski."

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Summary of Selected Reportable Conditions					
North Dakota, 2003-2004					
Reportable Condition	**July - August 2004***	**January-August 2004***		**July - August 2003**	**January-August 2003**
Campylobacteriosis	26	92		12	61
Chlamydia	272	1280		272	1091
Cryptosporidiosis	1	9		3	12
E. coli, shiga toxin positive (non-O157)	1	6		1	4
E. coli O157:H7	8	12		4	9
Enterococcus, Vancomycin-resistant (VRE)	0	6		3	13
Giardiasis	2	18		8	32
Gonorrhea	15	85		19	55
Haemophilus influenzae (invasive)	0	3		0	3
Hepatitis A	0	1		1	1
Hepatitis B	1	4		2	2
HIV/AIDS	2	14		6	16
Legionellosis	1	2		0	1
Lyme Disease	0	0		0	0
Malaria	1	3		0	1
Meningitis, bacterial[1] (non meningococcal)	0	6		1	3
Meningococcal disease	1	2		0	1
Mumps	1	1		0	0
Pertussis	509	609		3	6
Q fever	0	0		1	1
Rabies (animal)	11	49		10	47
Salmonellosis	10	30		9	32
Shigellosis	1	3		0	6
Staphylococcus aureus, Methicillin-resistant (MRSA)	175	903		252	901
Streptococcal disease, Group A[2] (invasive)	1	10		4	15
Streptococcal disease, Group B[2] (infant < 3 months of age)	0	0		1	3
Streptococcal disease, Group B[2] (invasive[3])	6	32		6	21
Streptococcal disease, other[2] (invasive)	5	10		6	9
Streptococcal pneumoniae[2], (invasive, children < 5 years of age)	0	2		0	4
Streptococcal pneumoniae[2] (invasive[4])	7	41		3	41
Streptococcus pneumoniae[2], drug-resistant	0	0		0	3
Tuberculosis	0	3		0	2
West Nile Virus Infection	18	18		473	474

*Provisional data

[1] Meningitis caused by *Staphylococcus aureus* and *Streptococcus pneumoniae.*

[2] Includes invasive infections caused by streptococcal disease not including those classified as meningitis.

[3] Includes invasive infections of streptococcal, Group B, disease in persons ≥ 3 months of age.

[4] Includes invasive infections caused by *Streptococcus pneumoniae* in persons ≥ 5 years of age.